

CLAIMS

1. A chromatography column having a column tube and  
end filter arrangements which, in use, retain a bed of  
particulate chromatography medium in the column tube  
between them while allowing the passage of fluid for  
chromatography;

at least one of the end filter arrangements being at  
the front end of a plunger which is axially slidable along  
inside the column tube, makes a seal outwardly against the  
tube and incorporates an internal flow conduit  
communicating along the plunger between a permeable filter  
portion of the respective end filter arrangement and a rear  
part of the plunger outside the column tube;

the plunger comprising a tubular stem of glass or  
other formable material which defines in one piece said  
internal flow conduit, the permeable filter portion being  
integrally bonded to the front end of the tubular stem  
across the internal flow conduit.

2. A chromatography column according to claim 1 in which  
the filter portion is integrally fused to the plunger  
stem.

3. A chromatography column according to claim 1 or claim  
2 in which both stem and filter portion are of glass or  
thermoplastics material.

4. A chromatography column according to claim 1 in which  
the tubular stem extends as a one-piece integral whole back  
to a rear connection union at the rear of the plunger.

5. A chromatography column according to claim 4 in which the rear connection union has a joint boundary at the exterior of the plunger stem.

5 6. A chromatography column according to any one of the  
: preceding claims in which an outwardly-directed sealing  
portion at or adjacent the front end of the plunger which  
makes a seal directly against the column wall, or which  
mounts a deformable seal element for making such a seal, is  
10 joined to the permeable filter portion via a one-piece  
integral instruction.

15 7. A chromatography column according to claim 6 in which  
the permeable filter portion is bonded to the plunger's  
outer wall by being integrally fused therewith.

20 8. A chromatography column according to any one of the  
preceding claims in which the plunger further comprises an  
outer plunger wall spaced outwardly from said tubular stem  
defining the internal flow conduit, the outer plunger wall  
and tubular stem being integrally bonded to one another at  
the front end of the plunger so as to seal off an internal  
space of the plunger, around said tubular stem, at the  
front end.

25 9. A chromatography column according to any one of the  
preceding claims in which one end of the column tube has a  
full-diameter opening receiving the plunger and the other  
end is a closed end, converging to a union for an external  
30 fluid flow conduit and having a fixed permeable filter  
element across the column tube adjacent the closed end.